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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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## Complete if Known

Application Number	09/976,927
Filing Date	October 11, 2001
First Named Inventor	Ramanath, G.
Art Unit	2813
Examiner Name	Kielin, Erik J.
Attorney Docket Number	020752-000111US

Sheet 1 of 1

## U.S. PATENT DOCUMENTS

Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
EK	A	Ahrens, C. et al., "Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization," Applied Surface Science, 1995, pp. 285-290, Vol. 91.	
EK	B	Ding, P.J. et al., "Effects of the addition of small amounts of Al to copper: Corrosion, resistivity, adhesion, morphology, and diffusion," J. Appl. Phys., April 1994, pp. 3627-3631, Vol. 75(7).	
EK	C	Ding, P.J. et al., "Oxidation resistant high conductivity copper films," Appl. Phys. Lett. May 1994, pp. 2897-2899, Vol. 64(21).	
EK	D	McBrayer, J.D. et al., "Diffusion of metals in silicon dioxide," J. Electrochem. Soc., June 1986, pp. 1242-1246, Vol. 133(6).	
	E	Moshfegh, A.Z. et al., "Bias sputtered Ta modified diffusion barrier in Cu/Ta(VB)/Si(111) structures," Thin Solid Films, 2000, pp. 10-17, Vol. 376.	
EK	F	Raghavan, G. et al., "Diffusion of copper through dielectric films under bias temperature stress," Thin Solid Films, 1995, pp. 168-176, Vol. 262.	
	G	Reed, M.A. and TOUR, J.M., "Computing with molecules," Scientific American, 2000, pp. 88-93, Vol. 282(6).	
	H	Sekiguchi, A. et al., "Microstructural and morphological changes during thermal cycling of Cu thin films," J. Japan Inst. Metals, 2000, pp. 379-382, Vol. 64(5).	

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Examiner Signature	Erik Kielin	Date Considered	2/23/03
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